

SEQUENCE LISTING

<110> KIRIN BEER KABUSHIKI KAISHA

<120> ANTI TRAIL-R ANTIBODY

<130> PH-1573-PCT

<140>

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<150> JP2001-150213

<151> 2001-05-18

<150> JP2001-243040

<151> 2001-08-09

<150> JP2001-314489

<151> 2001-10-11

<160> 45

<170> PatentIn Ver. 2.1

<210> 1

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 1

cacgaattca ccatggcgcc accaccagct

30

<210> 2

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 2

tttctcgagg cggccgctta tcaactccaag gacacggcag agcctgtg 48

<210> 3

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 3

cacgaattcg ccaccatgga acaacgggga cag 33

<210> 4

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 4

tttctcgagg cggccgctca ttaggacatg gcagagtctg cattacct 48

<210> 5

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 5

ttctacgagc ggcttatcac agcctcctcc tctgaga 37

<210> 6  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 6  
ttctacgagc ggccgcttat cacaagtctg caaagtcac 40

<210> 7  
<211> 27  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 7  
ggtcgggag atcatgaggg tgcctt 27

<210> 8  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 8  
gtgcacgccg ctggtcaggg cgcctg 26

<210> 9  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 9

ggtgccaggg ggaagaccga tgg

23

<210> 10

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 10

atatagatct ctcagttagg acccagaggg aacc

34

<210> 11

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 11

gatgggccct tgggtgctagc tgaggagacg g

31

<210> 12

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 12

gttgaagctc tttgtgacgg gcgagc

26

<210> 13  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 13  
tggcgggaag atgaagacag atggtg 26

<210> 14  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 14  
atatgtcgac tacggggggg ctttctgaga gtc 33

<210> 15  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 15  
aagacagatg gtgcagccac cgtacgtttg at 32

<210> 16  
<211> 467  
<212> DNA  
<213> Homo sapiens

<400> 16

gtgactacg ggggggcttt ctgagagtca tggatctcat gtgcaagaaa atgaagcacc 60  
 tgtgtgttctt cctcctgctg gtggcggctc ccagatgggt cctgtcccag ctgcagctgc 120  
 aggagtcggg cccaggactg gtgaagcctt cggagaccct gtccctcacc tgcactgtct 180  
 ctgggtggctc catcatcagt aaaagttcct actggggctg gatccgccag cccccaggga 240  
 aggggctgga gtggattggg agtatctatt atagtgggag taccttctac aacccgtccc 300  
 tcaagagtcg agtcaccata tccgtagaca cgtccaagaa ccagttctcc ctgaagctga 360  
 gctctgtgac cgccgcagac acggctgtgt attactgtgc gagactgaca gtggctgagt 420  
 ttgactactg gggccaggga accctgggtca ccgtctcctc agctagc 467

<210> 17

<211> 146

<212> PRT

<213> Homo sapiens

<400> 17

Met Asp Leu Met Cys Lys Lys Met Lys His Leu Trp Phe Phe Leu Leu  
 1 5 10 15

Leu Val Ala Ala Pro Arg Trp Val Leu Ser Gln Leu Gln Leu Gln Glu  
 20 25 30

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys  
 35 40 45

Thr Val Ser Gly Gly Ser Ile Ile Ser Lys Ser Ser Tyr Trp Gly Trp  
 50 55 60

Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Ser Ile Tyr  
 65 70 75 80

Tyr Ser Gly Ser Thr Phe Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr  
 85 90 95

Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser  
 100 105 110

Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Leu Thr Val  
 115 120 125

Ala Glu Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 130 135 140

Ala Ser  
145

<210> 18  
<211> 421  
<212> DNA  
<213> Homo sapiens

<400> 18  
tcacagatct ctcagttagg acccagaggg aaccatggaa gccccagctc agcttctctt 60  
cctcctgcta ctctggctcc cagataccac cggagaaatt gtgttgacac agtctccagc 120  
caccctgtct ttgtctccag gggaaagagc caccctctcc tgcagggcca gtcagagtgt 180  
tagcagcttc ttagcctggg accaacagaa acctggccag gctcccaggc tctctatcta 240  
tgatgcatcc aacagggcca ctggcatccc agccagggtc agtggcagtg ggtctgggac 300  
agacttcaact ctcacatca gcagcctaga gcctgaagat tttgcagttt attactgtca 360  
gcagcgtagc aactggcctc tcactttcgg ccctggggacc aaagtggata tcaaacgtac 420  
g 421

<210> 19  
<211> 129  
<212> PRT  
<213> Homo sapiens

<400> 19  
Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro  
1 5 10 15  
Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser  
20 25 30  
Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
35 40 45  
Val Ser Ser Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro  
50 55 60  
Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala  
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
85 90 95

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser  
100 105 110

Asn Trp Pro Leu Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg  
115 120 125

Thr

<210> 20

<211> 467

<212> DNA

<213> Homo sapiens

<400> 20

gtcgactacg ggggggcttt ctgagagtca tggatctcat gtgcaagaaa atgaagcacc 60  
tgtgtttott cctcctgctg gtggcggctc ccagatgggt cctgtcccag ttgcagctgc 120  
aggagtccgg cccaggactg gtgaagccct cggagaccct gtccctcacc tgcactgtct 180  
ctggtggctc catcagcagt aggagtaact actggggctg gatccgccag cccccaggga 240  
aggggctgga gtggattggg aatgtctatt atagagggag cacctactac aattogtccc 300  
tcaagagtgc agtcaccata tccgtagaca cgtccaagaa ccagttctcc ctgaagctga 360  
gctctgtgac cgtcgcagac acggctgtgt attactgtgc gagactgtca gtggctgagt 420  
ttgactactg gggccaggga atcctgggtc cgtctcctc agctagc 467

<210> 21

<211> 146

<212> PRT

<213> Homo sapiens

<400> 21

Met Asp Leu Met Cys Lys Lys Met Lys His Leu Trp Phe Phe Leu Leu  
1 5 10 15

Leu Val Ala Ala Pro Arg Trp Val Leu Ser Gln Leu Gln Leu Gln Glu  
20 25 30

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys  
8/20

35

40

45

Thr Val Ser Gly Gly Ser Ile Ser Ser Arg Ser Asn Tyr Trp Gly Trp  
 50 55 60

Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Asn Val Tyr  
 65 70 75 80

Tyr Arg Gly Ser Thr Tyr Tyr Asn Ser Ser Leu Lys Ser Arg Val Thr  
 85 90 95

Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser  
 100 105 110

Val Thr Val Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Leu Ser Val  
 115 120 125

Ala Glu Phe Asp Tyr Trp Gly Gln Gly Ile Leu Val Thr Val Ser Ser  
 130 135 140

Ala Ser  
 145

<210> 22

<211> 417

<212> DNA

<213> Homo sapiens

<400> 22

agatctctca gttaggaccc agaggggaacc atggaagccc cagctcagct tctcttcctc 60  
 ctgctactct ggctcccaga taccaccgga gaaattgtgt tgacacagtc tccagccacc 120  
 ctgtctttgt ctccagggga aagagccacc ctctcttgta gggccagtca gagggttagc 180  
 agcttcttag cctggtacca acagaaacct ggccaggetc ccaggctcct catctatgat 240  
 gcatccaaca gggccactgg cagcccagcc aggttcagtg gcagtgggtc tgggacagac 300  
 ttcactetca ccatcagcag cctagagcct gaagattttg cagtttatta ctgtcagcag 360  
 cgtagcgact ggctctcac ttctggccct gggaccaaag tggatatcaa acgtaog 417

<210> 23

<211> 129

<212> PRT

<213> Homo sapiens

<400> 23

Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro  
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser  
20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
35 40 45

Val Ser Ser Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro  
50 55 60

Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ser Pro Ala  
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
85 90 95

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser  
100 105 110

Asp Trp Pro Leu Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg  
115 120 125

Thr

<210> 24

<211> 490

<212> DNA

<213> Homo sapiens

<400> 24

tcgactacgg gggggctttc tgagagtcac ggatctcatg tgcaagaaaa tgaagcacct 60  
gtgggttcttc ctctgctggtg tggcggctcc cagatgggtc ctgtcccagc tgcagctgca 120  
ggagtcgggc ccaggactgg tgaagccttc ggagaccctg tccctcacct gcactgtctc 180  
tgggtgctcc atcagcagta gtagttacta ctggggctgg gtccgccagc cccagggaa 240  
ggggctggag tggattggga gtatccatta tagtgggagt actttctaca acccgccct 300

caagagtcga gtcaccattt ccgtagacac gtccaagaac cagttctccc tgaagctgag 360  
 ctctgtgacc gccgcagaca cgactgtgta ttactgtgcg agacaggggt ctactgtggt 420  
 tcggggagtt tactactacg gtatggacgt ctggggccaa gggaccacgg tcaccgtctc 480  
 ctcagctagc 490

<210> 25

<211> 154

<212> PRT

<213> Homo sapiens

<400> 25

Met Asp Leu Met Cys Lys Lys Met Lys His Leu Trp Phe Phe Leu Leu  
 1 5 10 15

Leu Val Ala Ala Pro Arg Trp Val Leu Ser Gln Leu Gln Leu Gln Glu  
 20 25 30

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys  
 35 40 45

Thr Val Ser Gly Gly Ser Ile Ser Ser Ser Ser Tyr Tyr Trp Gly Trp  
 50 55 60

Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Ser Ile His  
 65 70 75 80

Tyr Ser Gly Ser Thr Phe Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr  
 85 90 95

Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser  
 100 105 110

Val Thr Ala Ala Asp Thr Thr Val Tyr Tyr Cys Ala Arg Gln Gly Ser  
 115 120 125

Thr Val Val Arg Gly Val Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln  
 130 135 140

Gly Thr Thr Val Thr Val Ser Ser Ala Ser  
 145 150

<210> 26  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 26  
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 ctgctactct ggctcccaga taccaccgga gaaattgtgt tgacgcagtc tccaggcacc 120  
 ctgtctttgt ctccagggga aagagccacc ctctcctgca gggccagtca gagtgttagc 180  
 agcagctact tagcctggta ccagcagaaa cctggccagg ctcccaggct cctcatctat 240  
 ggtgcatcca gcagggccac tggcatccca gacaggttca gtggcagtgg gtctgggaca 300  
 gacttcactc tcaccatcag cagactggag cctgaagatt ttgcagtgtg ttactgtcag 360  
 cagtatggta gctcacctct gtacactttt ggccagggga ccaagctgga gatcaaactg 420  
 acg 423

<210> 27  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 27  
 Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro  
 1 5 10 15  
 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser  
 20 25 30  
 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
 35 40 45  
 Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala  
 50 55 60  
 Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro  
 65 70 75 80  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
 85 90 95  
 Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr  
 12/20

100

105

110

Gly Ser Ser Pro Leu Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile  
 115 120 125

Lys Arg Thr  
 130

<210> 28  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

<400> 28  
 ctcaacaacc acatctgtcc tctagagaaa accctgtgag cacagctcct caccatggac 60  
 tggacctgga ggatcctctt ctiggtggca gcagctacaa gtgccactc ccaggtgcag 120  
 ctggtgcagt ctggggctga gatgaagaag cctggggcct cagtcaaggt ctcctgcaag 180  
 acttctggat acaccttcac caattataag atcaactggg tgcgacaggc ccctggacaa 240  
 ggacttgagt ggatgggatg gatgaaccct gacactgata gcacaggcta tccacagaag 300  
 ttccagggca gagtccacat gaccaggaac acctccataa gcacagccta catggagctg 360  
 agcagcctga gatctgagga cagggccgtg tattactgtg cgagatccta tggttcgggg 420  
 agttattata gagactatta ctacggtatg gacgtctggg gccaaaggac caggttcacc 480  
 gtctcctca 489

<210> 29  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 29  
 Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Ser  
 1 5 10 15

Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Met Lys Lys  
 20 25 30

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe  
 35 40 45

Thr Asn Tyr Lys Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 13/20

50	55	60
Glu Trp Met Gly Trp Met Asn Pro Asp Thr Asp Ser Thr Gly Tyr Pro		
65	70	75 80
Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser		
85	90	95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val		
100	105	110
Tyr Tyr Cys Ala Arg Ser Tyr Gly Ser Gly Ser Tyr Tyr Arg Asp Tyr		
115	120	125
Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser		
130	135	140
Ser		
145		

<210> 30  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 30  
 gaggaactgc tcagtttagga cccagaggga accatggaag ccccagctca gcttctcttc 60  
 ctctgtctac tctggctccc agataccacc ggagaaattg tggtgacaca gtctccagcc 120  
 accctgtctt tgtctccagg ggaaagagcc accctctcct gcagggccag tcagagtgtt 180  
 agcagctact tagcctggta ccaacagaaa cctggccagg ctcccaggct cctcatctat 240  
 gatgcatcca acagggccac tggcatcca gccaggttca gtggcagtgg gtctgggaca 300  
 gacttcactc tcaccatcag cagcctagag cctgaagatt ttgcagtta ttactgtcag 360  
 cagcgtagca actggccgct cactttcggc ggagggacca aggtggagat caaacga 417

<210> 31  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 31

Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro  
 1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser  
 20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
 35 40 45

Val Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro  
 50 55 60

Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala  
 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
 85 90 95

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser  
 100 105 110

Asn Trp Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg  
 115 120 125

<210> 32

<211> 497

<212> DNA

<213> Homo sapiens

<400> 32

gagctctgag agaggagccc agccctggga ttttcagggtg ttttcatttg gtgatcagga 60  
 ctgaacagag agaactcacc atggagtittg ggctgagctg gctttttctt gtggctattt 120  
 taaaagggtgt ccagtgtgag gtacagctgt tggagtctgg gggaggcttg gtacagcctg 180  
 ggagggtccct gagactctcc tgtgcagcct ctggattcac ctttagcagc tatgccatga 240  
 gctgggtccg ccaggctcca gggaaggggc tggagtgggt ctgagctatt agtggtagtg 300  
 gtggtagcag atactacgca gactccgtga agggccggtt caccatctcc agagacaatt 360  
 ccaagaacac gctgtatctg caaatgaaca gcctgagagc cgaggacacg gccgtatatt 420  
 actgtgcgaa agagagcagt ggctggttcg gggcctttga ctactggggc cagggaaccc 480  
 tggtcaccgt ctctca 497

<210> 33  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 33  
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly  
 1 5 10 15  
 Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln  
 20 25 30  
 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe  
 35 40 45  
 Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu  
 50 55 60  
 Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Arg Tyr Tyr Ala  
 65 70 75 80  
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn  
 85 90 95  
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val  
 100 105 110  
 Tyr Tyr Cys Ala Lys Glu Ser Ser Gly Trp Phe Gly Ala Phe Asp Tyr  
 115 120 125  
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 130 135

<210> 34  
 <211> 446  
 <212> DNA  
 <213> Homo sapiens

<400> 34  
 gatcttaaaa gaggttcttt ctctgggatg tggcatgagc aaaactgaca agtcaaggca 60

ggaagatgtc gccatcacia ctcatgggt ttctgtgtct ctgggttcca gcctccaggg 120  
 gtgaaattgt gctgactcag tctccagact ttcagtctgt gactccaaag gagaaagtca 180  
 ccatcacctg cggggccagt cagagcattg gtagtagctt acactgggtac cagcagaaac 240  
 cagatcagtc tccaaagctc ctcatcaagt atgtttccca gtcctttctca ggggtccct 300  
 cgaggttcag tggcagtgga tctgggacag atttcaccct caccatcaat agcctggaag 360  
 ctgaagatgc tgcagcgtat tactgtcatc agagtagtag tttaccgatc accttcggcc 420  
 aaggacacg actggagatt aaacga 446

<210> 35  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 35  
 Met Ser Pro Ser Gln Leu Ile Gly Phe Leu Leu Leu Trp Val Pro Ala  
 1 5 10 15  
 Ser Arg Gly Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val  
 20 25 30  
 Thr Pro Lys Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile  
 35 40 45  
 Gly Ser Ser Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys  
 50 55 60  
 Leu Leu Ile Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg  
 65 70 75 80  
 Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser  
 85 90 95  
 Leu Glu Ala Glu Asp Ala Ala Ala Tyr Tyr Cys His Gln Ser Ser Ser  
 100 105 110  
 Leu Pro Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg  
 115 120 125

<210> 36  
 <211> 31

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 36  
tcttgccac cttggtgttg ctgggcttgt g 31

<210> 37  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 37  
aggcacacaa cagaggcagt tccagatttc 30

<210> 38  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 38  
gatttaggtg acactatag 19

<210> 39  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 39  
taatacgact cactataggg 20

<210> 40  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 40  
atcacagatc tctcaccatg gaagccccag ctcagcttct c 41

<210> 41  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 41  
ggtgcagcca ccgtacgttt gatctccacc ttg 33

<210> 42  
<211> 38  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Synthetic DNA

<400> 42  
gcgactaagt cgacaccatg gactggacct ggaggatc 38

<210> 43  
<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 43

agagagagag gctagctgag gagacggtga cc

32

<210> 44

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 44

ggtacgtgaa cogtcagatc gcctgga

27

<210> 45

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 45

tctatataag cagagctggg tacgtcc

27